



[7590-01-P]

NUCLEAR REGULATORY COMMISSION

10 CFR Parts 20, 26, 50, 51, 52, 72, 73, and 140

[NRC-2015-0070]

RIN 3150-AJ59

Regulatory Improvements for Power Reactors Transitioning to Decommissioning

AGENCY: Nuclear Regulatory Commission.

ACTION: Regulatory analysis; availability.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) has prepared a regulatory analysis to support the regulatory basis for a rulemaking to amend the NRC's regulations for the decommissioning of nuclear power reactors. This regulatory analysis is based on receipt of public comments for the preliminary draft regulatory analysis, which was issued in the *Federal Register* on May 9, 2017. The NRC is making the regulatory analysis available for public information.

DATES: The regulatory analysis is available **[INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**.

ADDRESSES: Please refer to Docket ID **NRC-2015-0070** when contacting the NRC about the availability of information for this action. You may obtain publicly-available information related to this action by any of the following methods:

- **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and search for

Docket ID **NRC-2015-0070**. Address questions about NRC dockets to Carol Gallagher; telephone: 301-415-3463; e-mail: Carol.Gallagher@nrc.gov. For technical questions, contact the individual listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **NRC's Agencywide Documents Access and Management System (ADAMS):**

You may obtain publicly-available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "ADAMS Public Documents" and then select "Begin Web-based ADAMS Search." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr.resource@nrc.gov. The ADAMS accession number for "Regulatory Analysis for Regulatory Basis: Regulatory Improvements for Power Reactors Transitioning to Decommissioning" is ML17332A075.

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: Chris Howells, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-1381, e-mail: Christopher.Howells@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Discussion

The NRC staff has prepared a regulatory analysis for the regulatory basis to support a rulemaking that would amend the NRC's regulations for the decommissioning of nuclear power reactors. The NRC's goals in amending these regulations would be to provide for an efficient

decommissioning process; reduce the need for exemptions from existing regulations; address other decommissioning issues deemed relevant by the NRC staff; and support the principles of good regulation, including openness, clarity, and reliability. The NRC is recommending rulemaking in the areas of emergency planning, physical security, cyber security, drug and alcohol testing, training requirements for certified fuel handlers, decommissioning trust funds, applicability of backfitting provisions, and offsite and onsite financial protection requirements and indemnity agreements. These revised requirements would formalize steps to transition a power reactor from operating status to decommissioning while reducing the need for exemptions and license amendments. The NRC staff is also recommending clarifying requirements regarding topics such as spent fuel management and environmental reporting.

Accompanying this rulemaking are updates to guidance that address aging management, the appropriate role of State and local governments in the decommissioning process, the level of NRC review of a licensee's Post-Shutdown Decommissioning Activities Report, the options for decommissioning, and the timeframe associated with decommissioning.

The regulatory analysis discusses the economic impact to the nuclear power industry, government, and society that would result from the rulemaking and guidance contemplated by the regulatory basis. The regulatory analysis discusses the cost benefit analysis that was completed for the various alternatives put forth by the staff, and shows that the staff's recommendation for rulemaking and guidance development is overall cost beneficial to the nuclear power industry, government, and society.

II. Cost Benefit Analysis Summary

The following table provides the quantified and non-quantified costs and benefits for the staff-recommended alternatives discussed in the regulatory basis for each area of

decommissioning under specific decommissioning topics and regulatory approaches. The complete analysis discusses at length the NRC staff's process, alternatives considered, and evaluation of costs and benefits for each area of decommissioning.

Summary of Totals for the Recommended Alternatives

Areas of Decommissioning	Recommended Alternatives	Total Costs (2017 dollars)	
		7% NPV	3% NPV
Level of PSDAR Review by NRC	Rulemaking	\$ (377,000)	\$ (376,000)
Maintaining the Decommissioning Options	Guidance	\$ (220,000)	\$ (212,000)
Timeframe Associated with Decommissioning	Guidance	\$ (227,000)	\$ (218,000)
Role of External Stakeholders in Decommissioning	Guidance	\$ (239,000)	\$ (239,000)
Clarification Spent Fuel Management	Rulemaking	\$ (320,000)	\$ (324,000)
Record Retention Requirements	Guidance	\$ 851,000	\$ 963,000
Transportation Investigation, Tracing and Reporting Requirements	Guidance	\$ 615,000	\$ 698,000
Emergency Preparedness	Rulemaking	\$ 6,148,000	\$ 14,513,000
Physical Security	Rulemaking	\$ 340,000	\$ 1,850,000
Cyber Security	Rulemaking	\$ (200,000)	\$ (208,000)
Fitness for Duty, Drugs & Alcohol	Guidance	\$ 5,809,000	\$ 13,377,000
Fitness for Duty, Fatigue	Status Quo	\$ -	\$ -
Minimum Staffing and Training Requirements NLO/CFH	Rulemaking	\$ 265,000	\$ 829,000
Decommissioning Trust Fund	Rulemaking	\$ 71,000	\$ 1,032,000
Offsite & Onsite Financial Protection	Rulemaking	\$ 264,000	\$ 870,000
Backfit Protection	Rulemaking	\$ (216,000)	\$ (224,000)
Aging Management	Guidance	\$ (25,000)	\$ (25,000)
Total:		\$ 12,540,000	\$ 32,305,000
Nonmonetary Benefits			
Regulatory Efficiency: These alternatives would enable the NRC to better maintain and administer regulatory activities over the decommissioning process and ensure that the requirements for decommissioning power reactors are clear and appropriate.			
Safety and Security: These alternatives would continue to provide reasonable assurance of adequate protection of the public health and safety, and common defense and security at nuclear power reactor sites that have started decommissioning.			

Dated at Rockville, Maryland, this 1st day of February, 2018.

For the Nuclear Regulatory Commission.

Patricia K. Holahan, Director,
Division of Rulemaking,
Office of Nuclear Material Safety and Safeguards.